GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

WEATHER SUMMARY FOR AUGUST 1888.

Simla, 3rd September 1888.

Meteorological conditions during August are generally similar in all important respects to those of July. Both branches of the monsoon usually blow steadily throughout the month, and in several districts in India the rainfall of August is larger than that of July. Monsoon storms are also about as numerous in August as in July, but temperature as a rule is lower in the latter month. The principal points of difference between the weathers of the two months are, a general decrease in the force of the monsoon currents all round the coasts, and a slight but noticeable fall in temperature, more particularly towards the end of the month.

During the past month strongly marked monsoon conditions have prevailed throughout India, and the rainfall has been heavy and general. On several occasions during the month rain has been reported from almost all parts of India except the Carnatic and the Indus Valley, and on some occasions the rainfall, around the small cyclonic storms which passed across India during the month, was exceptionally heavy.

On the 1st typical monsoon conditions prevailed over India. Pressure was highest in the extreme south and lowest over the Indus Valley, while a trough of low pressure lay over the Gangetic plain and the northern parts of the Central Provinces. Both branches of the monsoon were blowing fairly strongly, and, except in the extreme North-West, the rainfall was very general. There were, however, no very heavy amounts, the largest being 2¼ inches at Hazaribagh and 2 inches at Jeypore. After the 1st the trough of low pressure over the Gangetic plain became less strongly marked and the influx of moist monsoon winds into Upper India less strong, so that the rainfall of the Punjab, Rajputana and the west of the North-Western Provinces decreased. These conditions lasted until the morning of the 6th, when a small depression was formed over the north-west angle of the Bay and the South-West Bengal, and rain again became general in Upper India. This depression never assumed any importance, but became very diffused as it travelled inland on a westerly course. It was, however, accompanied by much general rain in nearly all parts of India, the principal falls of the 6th and 7th being 6¾ inches at Roorkee, 4½ inches at Delhi, and about 4 inches at Simla and Chakrata. On the 8th and 9th the depression was still present, but the rainfall though general was lighter. On the 10th rain ceased in North-Western India and temperature rose quickly. On the 11th there was general and in places heavy rain over the Peninsula, the central parts of the country and Burma, but in North-Western India fair weather and a high temperature continued. Between the 12th and 16th there was very little change, general rain falling except in the North-West, where several stations reported fair and rather hot weather. On the 17th a slight barometric depression was shown over Bengal, to the west of which, *viz.*, at the stations of Hazaribagh, Gya and Benares, the rainfall was very heavy. This depression travelled slowly westward, reaching Sutna on the 18th, Jhansi on the 19th, Neemuch on the 20th, and Lower Sind on the 21st. During the whole of its progress across India it gave very heavy rain to the stations within or near its line of march.

17th.	ins.	18th.	ins.	19th.	ins.	20th.	ins.	21st.	ins.
Hazaribagh ..	7¾	Nowgong ..	5½	Saugor ..	6½	Mount Abu ..	7	Deesa ..	6½
Gya ..	6¼	Sutna ..	3½	Jhansi ..	1¾			Nagpur ..	3½
Benares ..	3½							Jubbulpore ..	3

No sooner had this depression filled up than another appeared at the head of the Bay. At 8 A. M. on the morning of the 22nd the centre lay near Saugor Island, where 4 inches of rain had fallen. This depression became rapidly deeper, and by the morning of the 23rd had become a very strongly marked storm ; very heavy rain was falling in Orissa and a strong cyclonic circulation prevailed around the centre. Rain was very general elsewhere and was heavy in parts of the Punjab. By the 24th the disturbance had reached the neighbourhood of Burdwan and a gale was blowing over Lower Bengal. Fourteen inches of rain had fallen at Saugar Island, 5 inches at Calcutta, and largish amounts in several other parts of the country. On the 25th the disturbance lay to the west of Berhampore and had apparently begin to fill up. On the 26th the centre had to a large extent filled up and the rainfall in its neighbourhood was only moderate. In North-Western India the weather was fair and generally rainfall was decreasing. The Chart of the 27th showed that the disturbance had suddenly undergone redevelopment, and 8½ inches of rain was reported from Gya (of which 7¾ inches fell between 6 P. M. of the 26th and 10 A. M. of the 27th), 3½ at Patna and 2¾ inches at Purneah, but after this effort the disturbance broke up and by the 29th had quite disappeared. On the 30th and 31st the most important feature of the weather was reported from the West Coast, where the monsoon current showed strong signs of falling off.

The temperature changes of the past month have been considerable in the Punjab, Guzerat and Sind, but elsewhere the heat has been fairly uniform throughout and about the average of the month. For the first six days the maxima were high, varying between 100° and 113°, in North-Western India, but after the 6th the thermometer fell, at first quickly, and the heat became moderate and continued so until the 22nd, when the weather became cool and remained so till the close of the month.

The table of rainfall at the end of the summary shows that the total fall during the month was deficient in the Western Panjab, the Trans-Gangetic portions of the North-Western Provinces, Northern Bengal, the Berars and Khandeish, Sind, Guzerat, the Deccan, Mysore, the Carnatic and Ceylon, and was in excess elsewhere. The only important deficiencies were reported from the Berars, the Deccan, Mysore and Ceylon, the falls elsewhere being only slightly below the average. The greatest excess was in Behar, but in Lower Bengal, Chutia Nagpur, Rajputana, Central India and Lower Burma the average was very largely exceeded.

The following table shows the amount of rain and the difference from the average during the month of August 1888, according to districts, as far as is indicated by the telegraphic reports :

Districts.	No. of Stations.	Average rainfall in August.	Difference from the average in August 1888.
Punjab, West	7	5·70	—0·06
„ East	4	8·79	+0·29
North-Western Provinces, Trans-Gangetic	9	13·25	—0·39
„ „ Cis-Gangetic	3	8·92	+4·80
Behar	2	10·02	+13·81
Northern Bengal	2	20·55	—1·98
Assam, Cachar	3	15·22	+0·77
Lower Bengal—Chutia Nagpur	7	16·99	+9·04
Orissa, Northern Circars	6	8·58	+1·11
Central Provinces, South	7	11·94	+1·89
Berar—Khandeish	2	6·84	—3·43
Rajputana, Central India—Saugor and Nerbudda. ..	8	11·16	+8·30
Sind—Cutch	3	2·12	—0·86
Guzerat	3	8·33	—1·63
Konkan	4	14·94	+0·08
Deccan—Hyderabad	5	6·19	—2·17
Malabar	4	20·73	+2·41
Mysore—Bellary	4	4·51	—1·71
Carnatic	6	3·87	—0·68
Lower Burma	6	24·77	+8·27
Ceylon	2	4·87	—2·55

W. L. DALLAS,
for *Offg. Meteorological Reporter to the Govt. of India.*